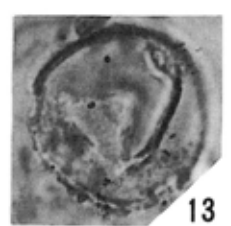
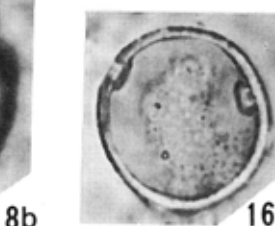
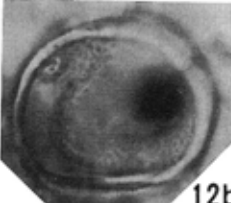
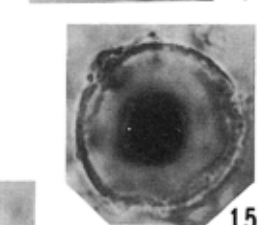
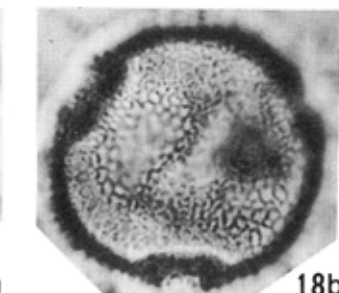
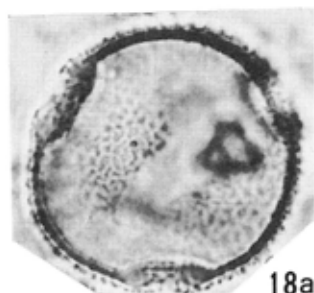
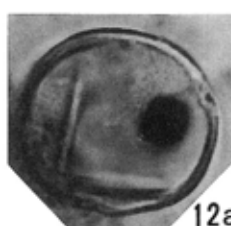
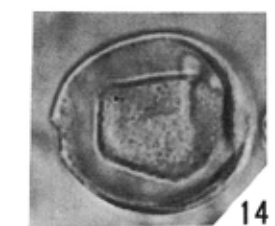
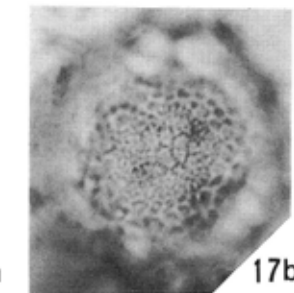
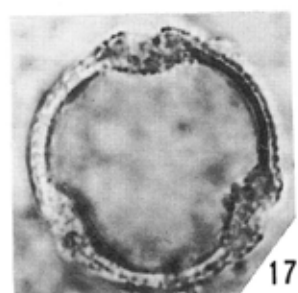
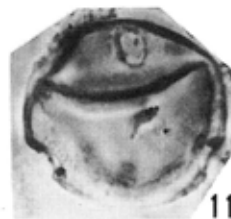
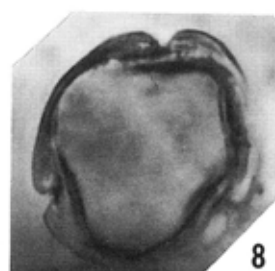
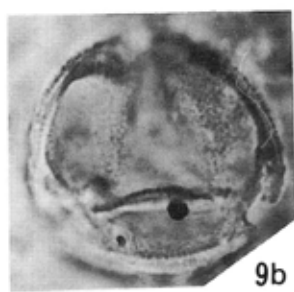
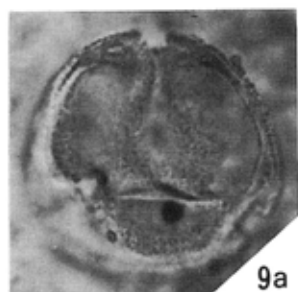
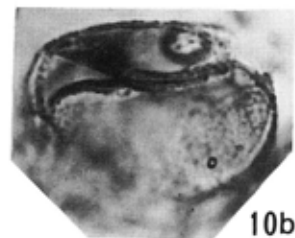
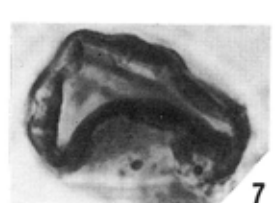
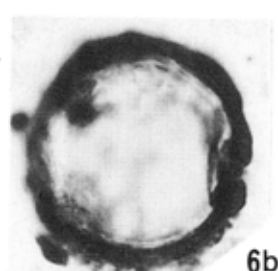
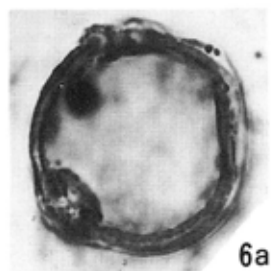
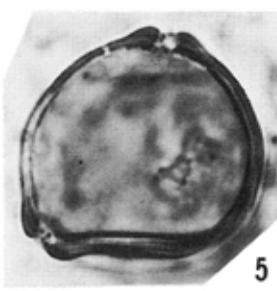
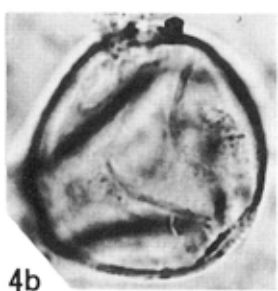
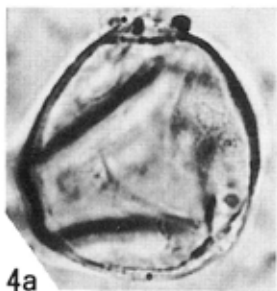
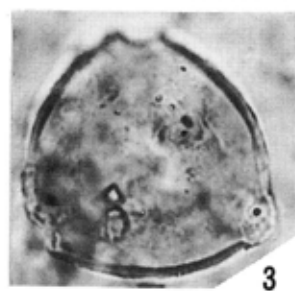
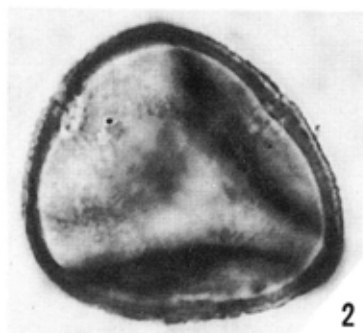
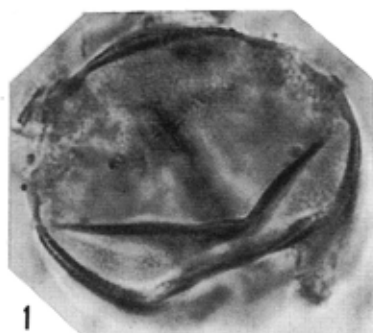


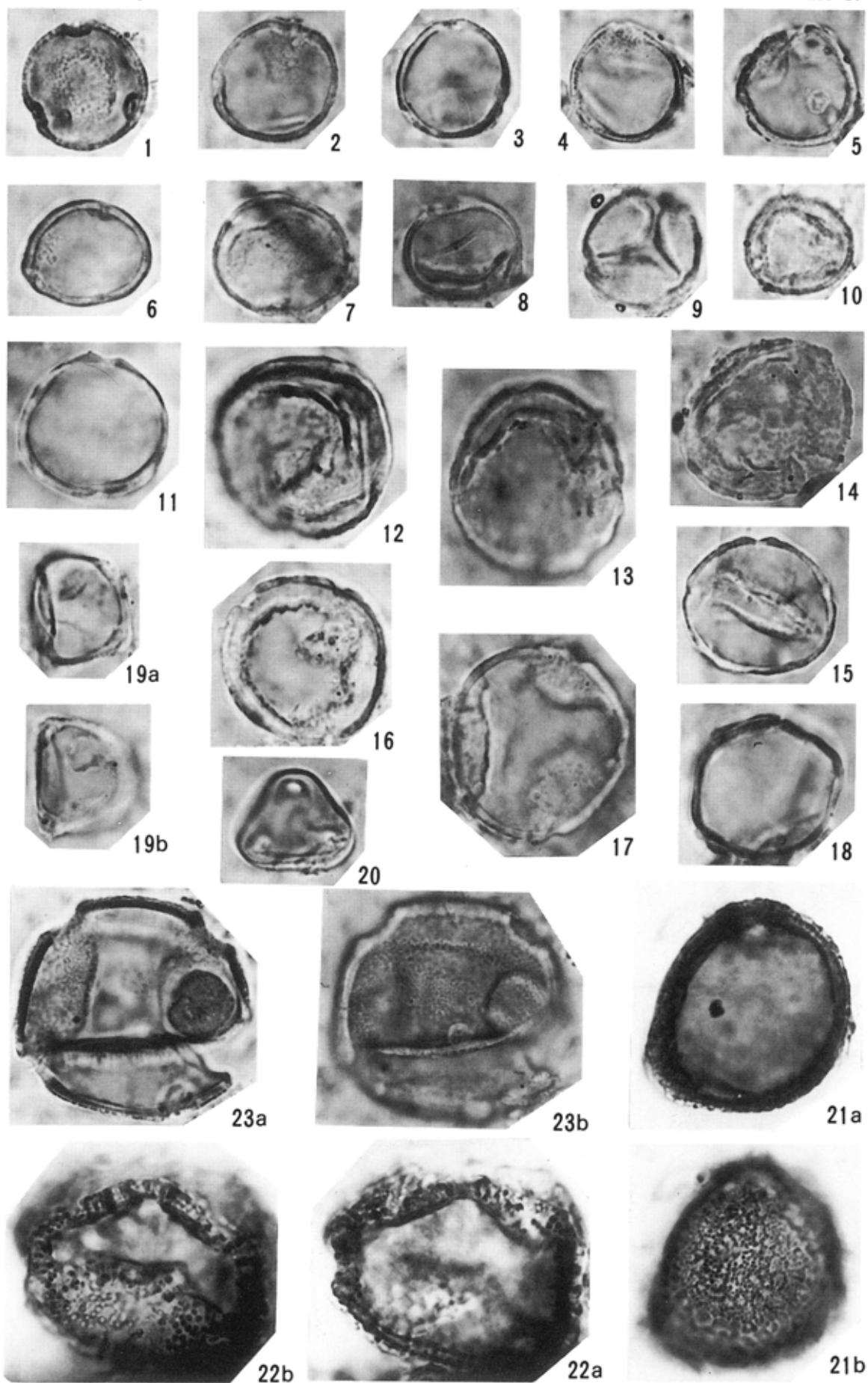
Explanation of plate 16  
(All figures magnified X 1000)

- Figs. 1 – 2 . *Subtriporopollenites rotundiporifer* n. sp.  
Jos 1 – 3 (GN 5323) ; fig. 2 : holotype.
- Figs. 3 – 4 . *Triorites scabratus* n. sp.  
Fig. 3 : Jos 1 – 10 (GN 5330), holotype; figs. 4 a-b: Jos 1 – 5 (GN 5325).
- Fig. 5 . *Triporopollenites parvus* Sah Jos 1 – 15 (GN 5335).
- Figs. 6 – 7 . *Cricotriporites anulatus* n. sp.  
Jos 1 – 12 (GN 5332) ; figs. 6 a-b: holotype.
- Fig. 8 . *Triatriopollenites* sp. Jos 1 – 4 (GN 5324).
- Fig. 9 a-b. *Trivestibulopollenites* sp. Jos 1 – 1 (GN 5321).
- Figs. 10 – 16. *Cricotriporites nigerianus* n. sp.  
Figs. 10a-b: Jos 1 – 12 (GN 5332) ; fig. 11: Jos 1 – 4 (GN 5324), holotype;  
figs. 12a-b. 13, 15: Jos 1 – 1 (GN 5321) ; fig. 14: Jos 1 – 6 (GN 5326) ;  
fig. 16: Jos 1 – 9 (GN 5329).
- Figs. 17 – 18. *Subtriporopollenites reticulatus* n. sp.  
Figs. 17a-b: Jos 1 – 3 (GN 5323) ; figs. 18a-b: Jos 1 – 8 (GN 5328),  
holotype.



Explanation of plate 17  
(All figures magnified X 1000)

- Fig. 1. *Cricotriporites nigerianus* n. sp. Jos 1 – 14 (GN 5334).
- Figs. 2 – 10. *Triporopollenites subrotundus* n. sp.  
Figs. 2, 5 – 8: Jos 1 – 1 (GN 5321) ; fig. 3: Jos 1 – 8 (GN 5328),  
holotype; fig. 4: Jos 1 – 3 (GN 5323); figs. 9, 10: Jos 1 – 2 (GN 5322).
- Figs. 11 – 16. *Ulmipollenites semiundulosus* n. sp.  
Figs. 11, 15: Jos 1 – 6 (GN 5326) ; fig. 12: Jos 1 – 12 (GN 5332) ; fig. 13:  
Jos 1 – 4 (GN 5324) ; fig. 14: Jos 1 – 1 (GN 5321) ; fig. 16: Jos 1 – 3  
(GN 5323), holotype.
- Figs. 17 – 18. *Carpinuspollis* sp.  
Fig. 17: Jos 1 – 1 (GN 5321) ; fig. 18: Jos 1 – 4 (GN 5324).
- Figs. 19a-b. *Tetraporopollenites* sp. Jos 1 – 6 (GN 5326).
- Fig. 20. *Anacolosidites* sp. Jos 1 – 9 (GN 5329).
- Figs. 21 – 22. *Retitriporites* sp.  
Figs. 21a-b: Jos 1 – 12 (GN 5332) ; figs. 22a-b: Jos 1 – 14 (GN 5334).
- Figs. 23a-b. ? *Multiporopollenites* sp. Jos 1 – 10 (GN 5330).

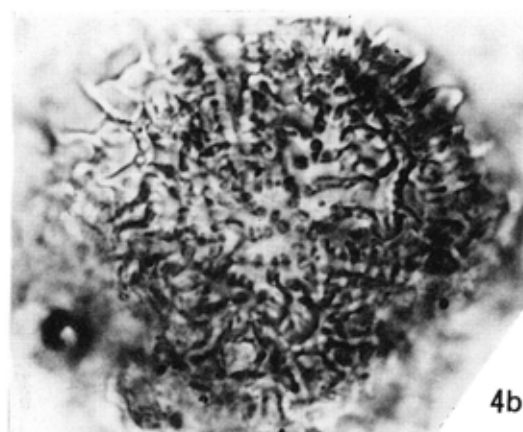
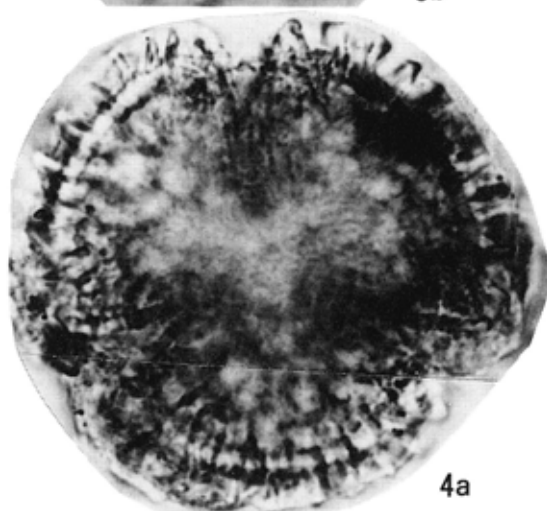
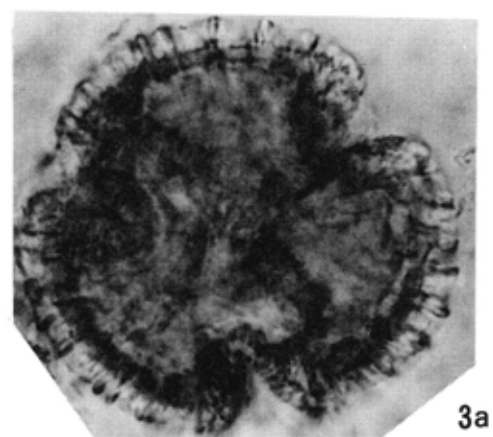
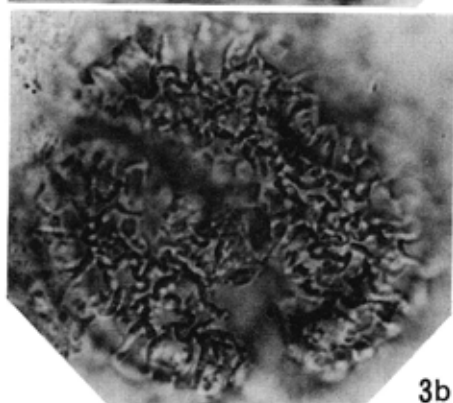
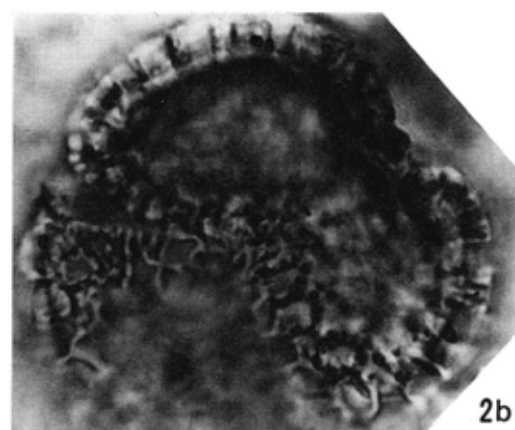
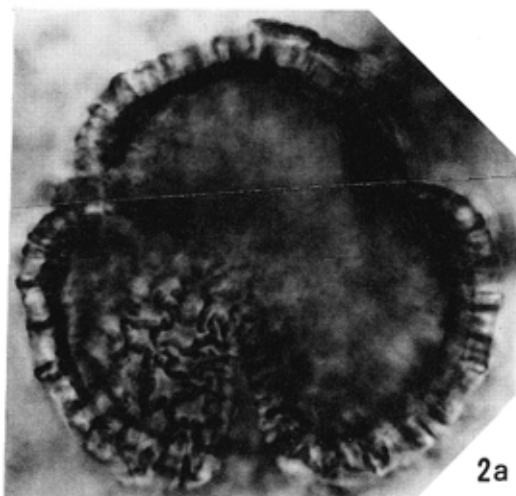
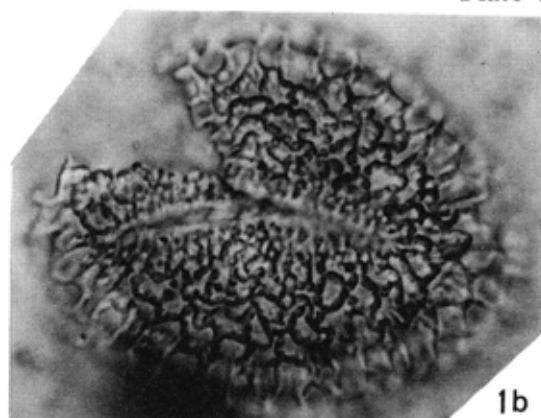
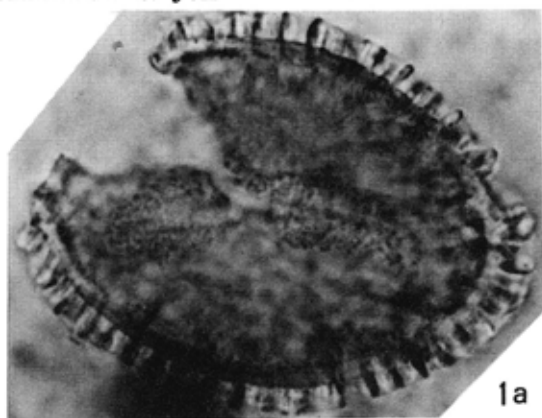


Explanation of plate 18  
(All figures magnified X 1000)

Figs. 1 a-b. *Retitrescolpites* sp a. Jos 1 – 1 (GN 5321).

Figs. 2 – 4 . *Retitrescolpites typicus* Sah

Figs. 2 a-b: Jos 1 – 4 (GN 5324); figs. 3 a-b: Jos 1 – 1 (GN 5321); figs  
4 a-b: Jos 1 – 3 (GN 5323).

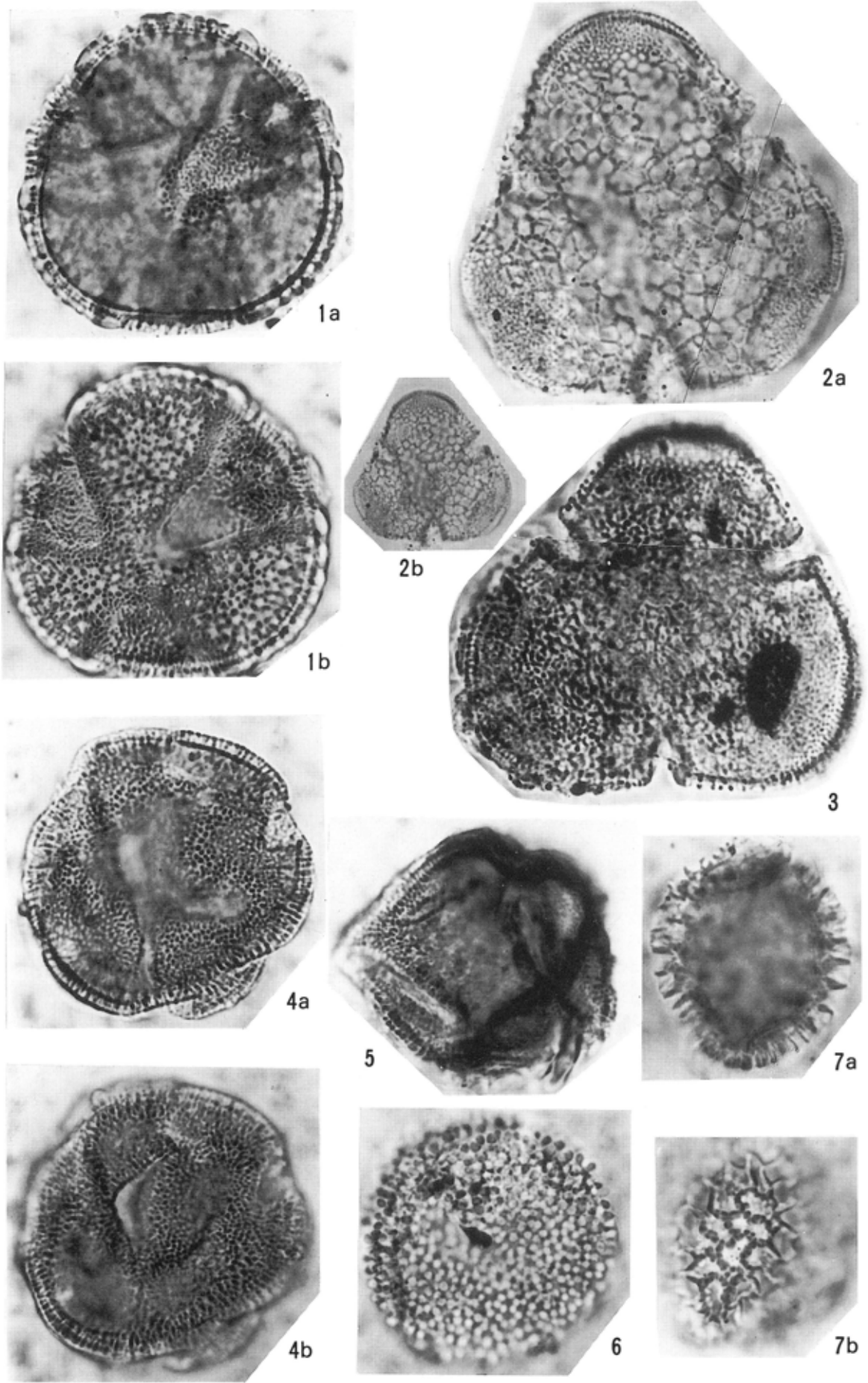


Explanation of plate 19

(All figures magnified X 1000 unless otherwise mentioned)

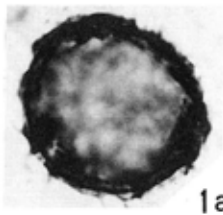
- Figs. 1 a-b. *Margocolporites vanwijhei* Germeraad, Hopping & Muller      Jos 1 – 8 (GN 5328).
- Fig. 2 – 3 . *Bombacacidites africanus* n. sp.  
Figs. 2 a-b: Jos 1 – 6 (GN 5326), holotype; fig. 2 b: X 400; fig. 3 : Jos 1 – 5 (GN 5325).
- Figs. 4 a-b. *Calystegiapollis* sp.      Jos 1 – 13 (GN 5333).
- Fig. 5 . *Sindorapollis* sp.      Jos 1 – 15 (GN 5335).
- Fig. 6 . *Clavainaperturites* cf. *clavatus* Van der Hammen & Wymstra      Jos 1 – 8 (GN 5328).
- Figs. 7 a-b. *Retipilonapites* sp.      Jos 1 – 4 (GN 5324).



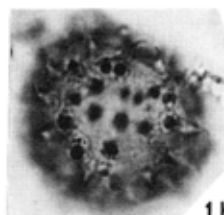


Explanation of plate 20  
(All figures magnified X 1000)

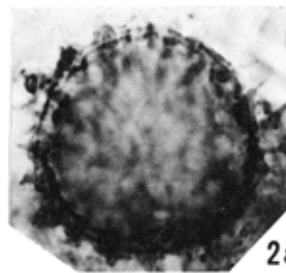
- Figs. 1 a-b. *Echitriporites* sp. Jos 1 – 13 (GN 5333).  
Figs. 2 – 5 . *Smilacipites echinatus* Wodehouse  
Figs. 2 a-b: Jos 1 – 12 (GN 5332) ; figs. 3 a-b: Jos 1 – 3 (GN 5323) ; fig.  
4 : Jos 1 – 1 (GN 5321) ; figs. 5 a-b: Jos 1 – 13 (GN 5333).  
Fig. 6 . *Echigraminidites* sp. Jos 1 – 11 (GN 5331).  
Figs. 7 – 14. *Malpighiaceoidites periporifer* n. gen. et sp.  
Figs. 7 , 14a-b: Jos 1 – 7 (GN 5327) ; fig. 8 : Jos 1 – 4 (GN 5324) ; fig.  
9 : Jos 1 – 6 (GN 5326); figs. 10a-b: Jos 1 – 3 (GN 5323); figs. 11a-b, 12 a-b:  
Jos 1 – 9 (GN 5329) ; figs. 13 a-b: Jos 1 – 10 (GN 5330) ; figs. 11a-b:  
holotype.



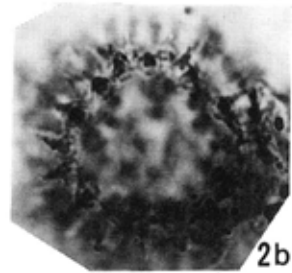
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1b



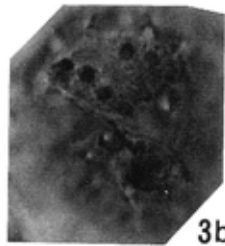
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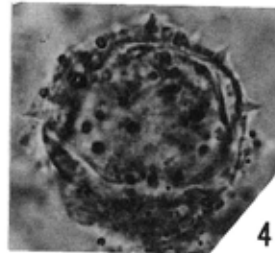
2b



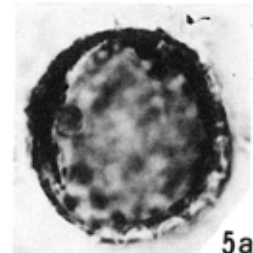
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3b



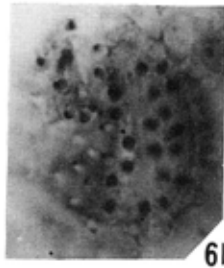
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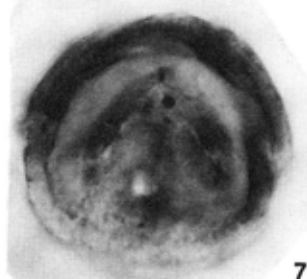
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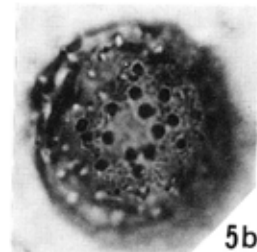
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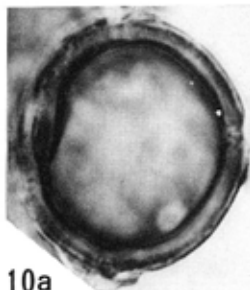
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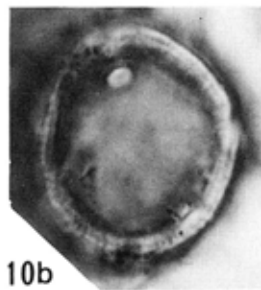
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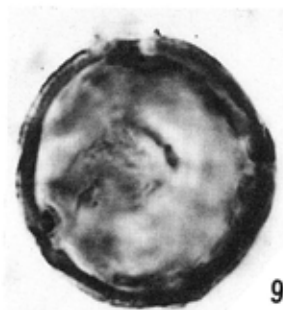
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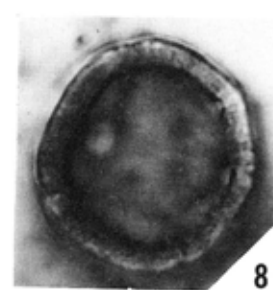
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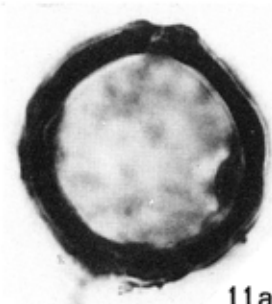
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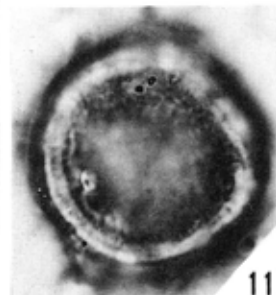
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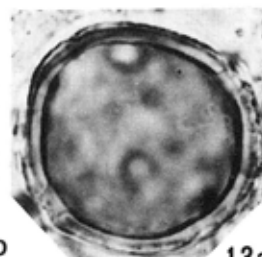
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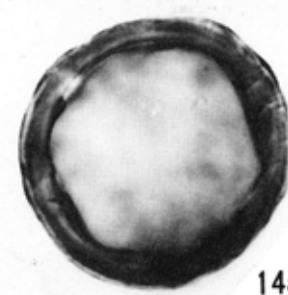
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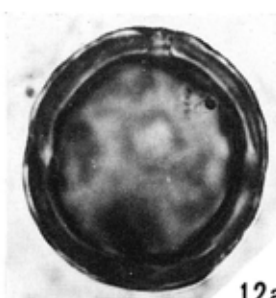
11b



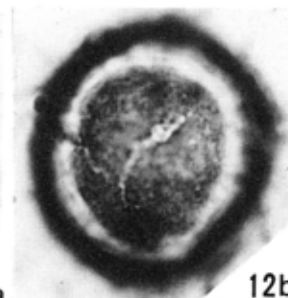
13a



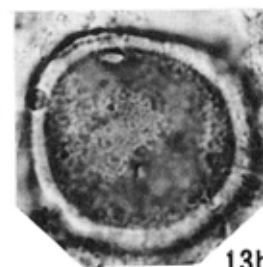
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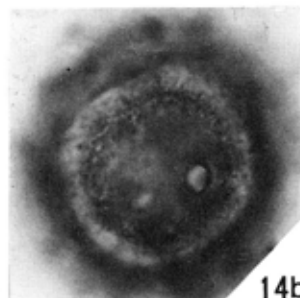
12a



12b



13b

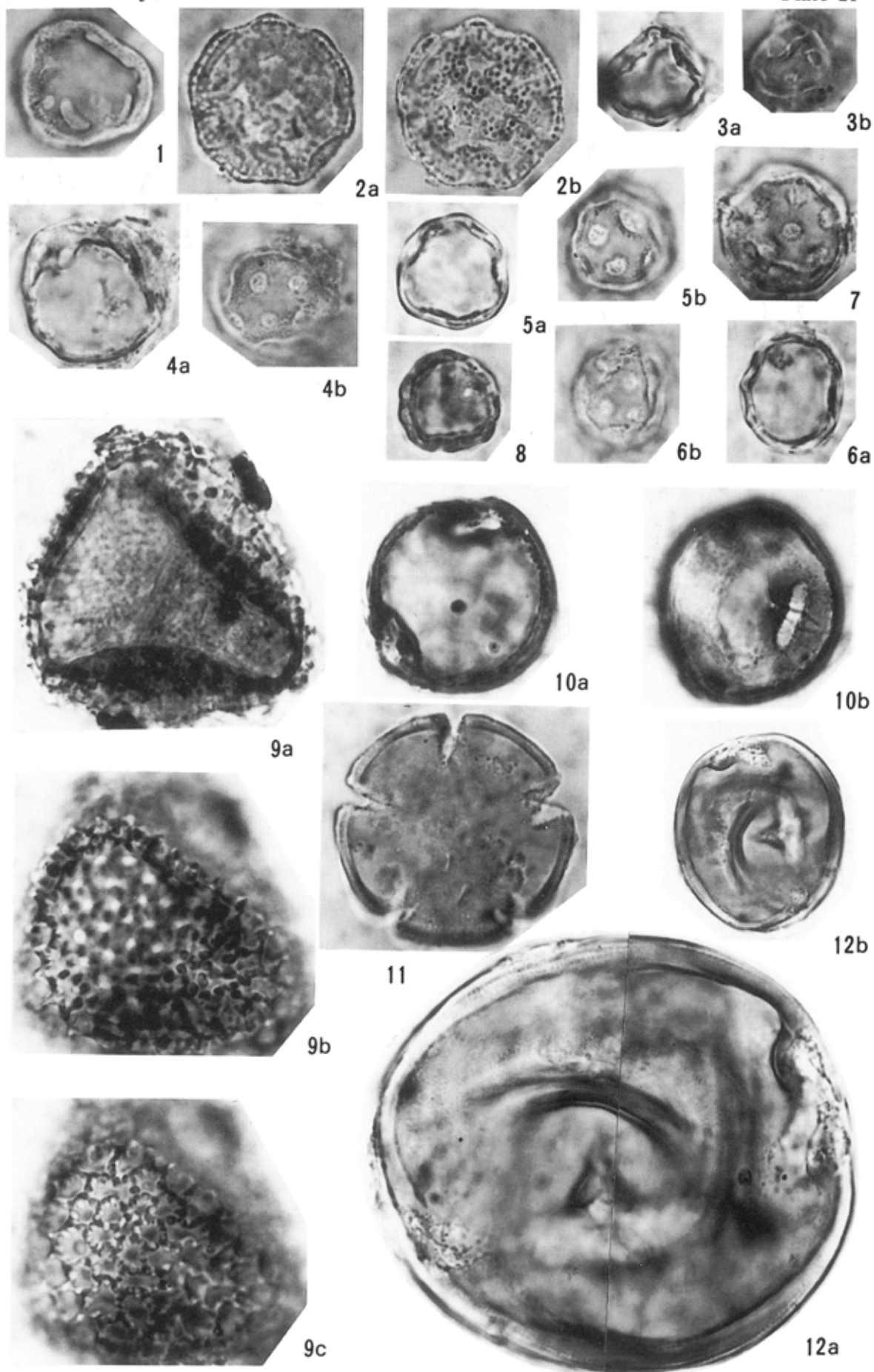


14b

# Explanation of plate 21

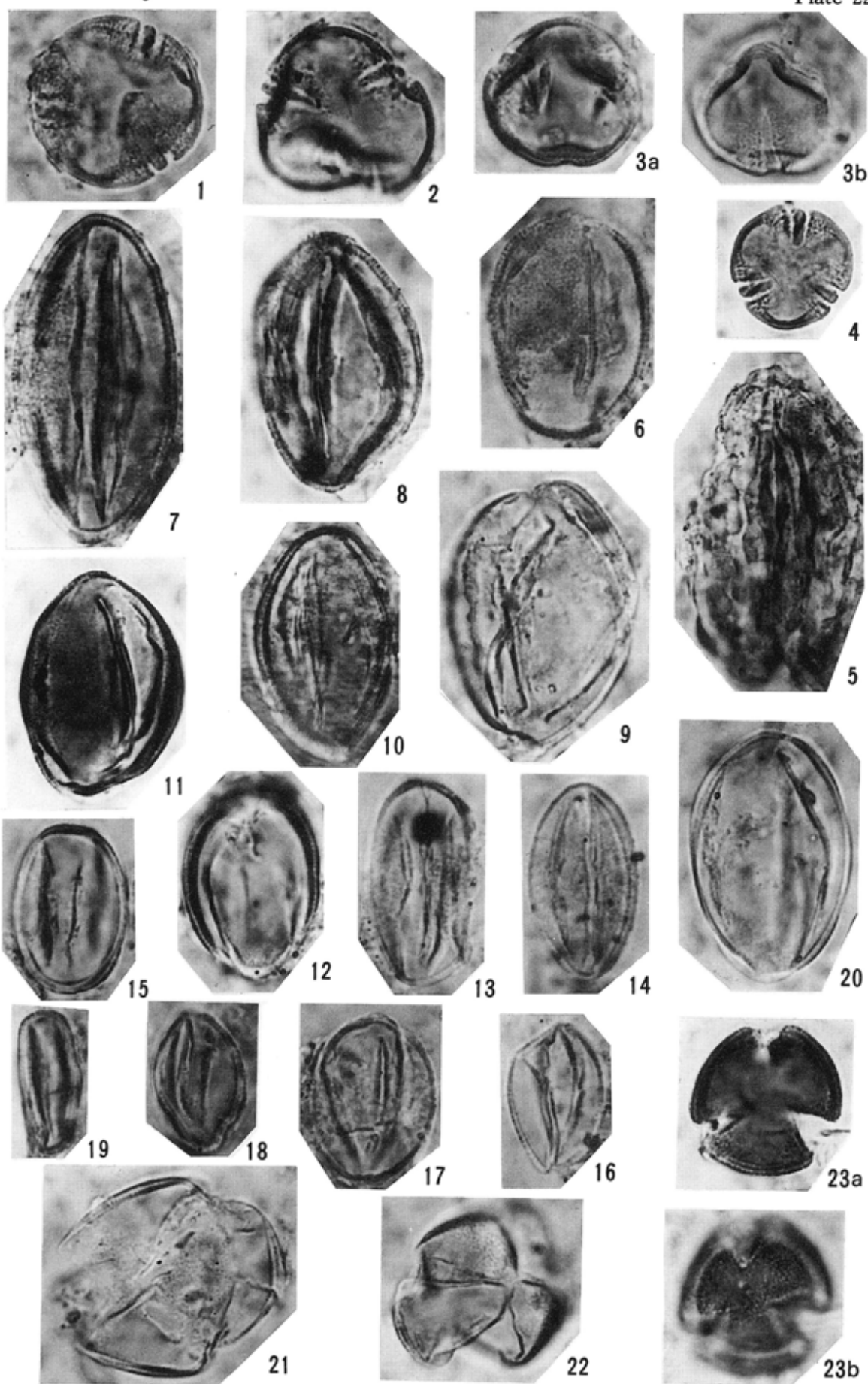
(All figures magnified X 1000 unless otherwise mentioned)

- Fig. 1 . Indeterminable pollen grain. Jos 1 – 1 (GN 5321).
- Figs. 2 a-b. *Graniperipollis* sp. Jos 1 – 7 (GN 5327).
- Figs. 3 – 8 . *Chenopodipollis dispersus* n. sp.  
Figs. 3 a-b, 4 a-b: Jos 1 – 6 (GN 5326); figs. 5 a-b: Jos 1 – 3 (GN 5323),  
holotype; figs. 6 a-b: Jos 1 – 2 (GN 5322) ; fig. 7 : Jos 1 – 8 (GN 5328) ;  
fig. 8 : Jos 1 – 1 (GN 5321).
- Figs. 9 a-c. *Persicarioipollis* sp. Jos 1 – 12 (GN 5332).
- Figs. 10a-b. ? *Brevitricolpites* sp. Jos 1 – 15 (GN 5335).
- Fig. 11. *Scabrastephanocolpites* cf. *scabratus* Van der Hammen & Garcia de Mutis  
Jos 1 – 3 (GN 5323).
- Figs. 12a-b. *Tetracolporites* sp. Jos 1 – 3 (GN 5323), fig. 12b: X 400.



Explanation of plate 22  
(All figures magnified X 1000)

- Figs. 1 – 4. *Ranunculacidites contaminatus* n. sp.  
fig. 1: Jos 1 – 3 (GN 5323), holotype; fig. 2: Jos 1 – 12 (GN 5332); figs.  
3 a-b: Jos 1 – 1 (GN 5321) ; fig. 4: Jos 1 – 13 (GN 5333).
- Fig. 5. *Marginipollis* cf. *concinus* Clarke & Frederiksen Jos 1 – 1 (GN 5321).
- Fig. 6. *Tricolpopollenites pseudoeuphorii* Pflug Jos 1 – 1 (GN 5321).
- Figs. 7 – 8, 10 – 11. *Quercoidites henrici* (Potonié) Potonié  
Figs. 7 – 8: Jos 1 – 4 (GN 5324); figs. 10: Jos 1 – 1 (GN 5321); fig. 11:  
Jos 1 – 12 (GN 5332).
- Fig. 9. *Cupuliferoidaepollenites* sp. a. Jos 1 – 3 (GN 5323).
- Figs. 12, 15 – 16. *Quercoidites microhenrici* (Potonié) Potonié  
Fig. 12: Jos 1 – 2 (GN 5322) ; figs. 15 – 16: Jos 1 – 1 (GN 5321).
- Figs. 13 – 14. *Cupuliferoidaepollenites josensis* n. sp.  
Fig. 13: Jos 1 – 1 (GN 5321) ; fig. 14: Jos 1 – 6 (GN 5326), holotype.
- Figs. 17 – 18. *Tricolpopollenites* cf. *minutus* González Guzmán n. comb. Jos 1 – 1  
(GN 5321).
- Fig. 19. *Cupuliferoidaepollenites* cf. *liblarensis* (Thomson) Potonié Jos 1 – 1  
(GN 5321).
- Fig. 20. *Cupuliferoidaepollenites* sp. b Jos 1 – 2 (GN 5322).
- Figs. 21 – 22. *Tricolpopollenites densus* Pflug  
Fig. 21: Jos 1 – 7 (GN 5327) ; fig. 22: Jos 1 – 6 (GN 5326).
- Figs. 23a-b. *Tricolpites* cf. *microreticulatus* Belsky, Boltenhagen & Potonié Jos 1 – 15  
(GN 5335).



Explanation of plate 23  
(All figures magnified X 1000)

Figs. 1 – 9. *Striatopollis nigericus* n. sp.

Fig. 1 : Jos 1 – 4 (GN 5324), holotype; figs. 2 , 7, 8: Jos 1 – 1 (GN 5321)  
figs. 3 , 4 : Jos 1 – 6 (GN 5326); fig. 5 : Jos 1 – 8 (GN 5328); figs. 6 ,  
9 : Jos 1 – 12 (GN 5332).

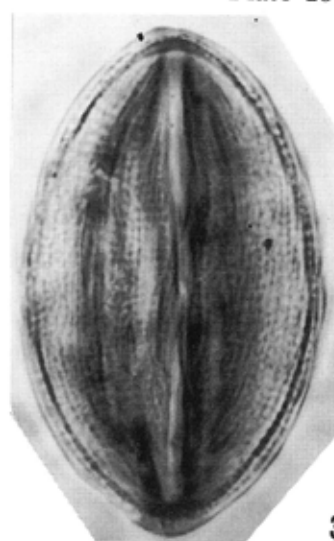




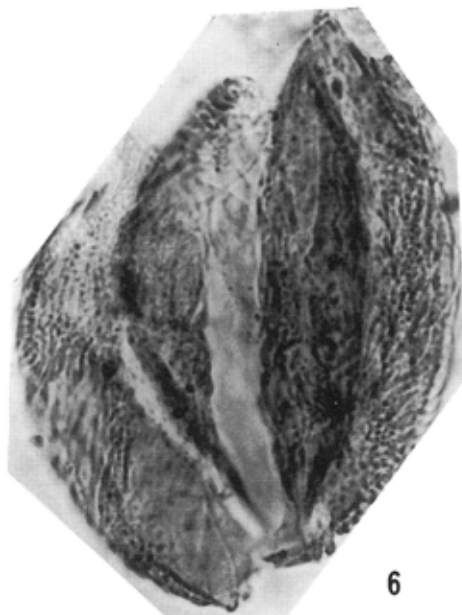
1



2



3



6



5



4



7



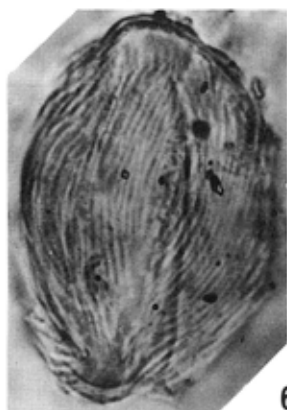
8



9

Explanation of plate 24  
(All figures magnified X 1000)

- Figs. 1 – 3, 7, 9 – 10. *Striatopollis variabilis* n. sp.  
Figs. 1, 3, 9, 10: Jos 1 – 1 (GN 5321) ; fig. 2: Jos 1 – 15 (GN 5335), holotype; fig. 7: Jos 1 – 9 (GN 5329).
- Figs. 4 – 6. *Striatopollis catatumbus* González Guzmán n. comb.  
Fig. 4: Jos 1 – 11 (GN 5331) ; fig. 5: Jos 1 – 1 (GN 5321) ;  
fig. 6: Jos 1 – 7 (GN 5327).
- Fig. 8. *Striatopollis nigericus* n. sp. Jos 1 – 5 (GN 5325).
- Figs. 11 – 13. *Striatopollis striatellus* (Takahashi) Takahashi  
Fig. 11: Jos 1 – 1 (GN 5321) ; fig. 12: Jos 1 – 3 (GN 5323) ;  
fig. 13: Jos 1 – 12 (GN 5332).



Explanation of plate 25  
(All figures magnified X 1000)

- Fig. 1.        *Striatopollis variabilis* n. sp.        Jos 1 – 1 (GN 5321).  
Figs. 2 – 7.   *Striatocolporites ovuliformis* n. sp.  
                 Fig. 2: Jos 1 – 9 (GN 5329) ; fig. 3: Jos 1 – 3 (GN 5323) ; figs. 4 a-b:  
                 Jos 1 – 11 (GN 5331), holotype; figs. 5 – 7: Jos 1 – 12 (GN 5332).  
Fig. 8.        *Striatocolporites* sp. a        Jos 1 – 1 (GN 5321).  
Figs. 9 a-b.   *Striatocolporites* sp. b        Jos 1 – 13 (GN 5333).  
Figs. 10a-b.   *Striatocolporites* cf. *striatulus* Takahashi & Jux n. comb.        Jos 1 – 5 (GN  
5325).